

REMARKS

With the present amendment, as is supported with the Declaration under Rule 132 of the expert Mr. Uwe Hauf (provided herewith), all of the claims of this application have now been amended to focus on the mounting of the treatment devices in accordance with this invention. While previously, the claims covered the mounting of either the treatment devices or conveying members, they now focus on the mounting of the treatment devices. Some of the claims additionally add that the treatment devices could be with or without at least one conveying member, and they all specifically require that the treatment device comprises an insertion element fitted into recesses (21) of carrier elements (4, 5).

The basic reference that is applied, namely that of Henington et al, does have treatment devices 16, but Henington et al absolutely fails to teach the features that are required by the claims of the instant application as they are now amended, in that:

- (a) the treatment devices of Henington et al have no insertion elements to carry or secure them; additionally
- (b) Henington et al has no disclosure whatever as to how its treatment devices are mounted in its apparatus; and
- (c) Henington et al has no disclosure whatever that any treatment device 16 fits into any recess in any carrier elements of Henington et al, or even that they are carried by carrier elements of Henington et al.

While Henington et al does disclose its treatment devices 16, it has no disclosure whatever, that they are mounted in any manner like its conveyor elements, or even that they are carried by any carrier elements, in any respect.

In this regard, the Examiner is specifically referred to numbered paragraph 7 of the Rule 132 Declaration provided herewith.

Additionally, all of the claims of the present application require, that the module system that includes treatment devices be flow nozzles, jet nozzles, fan nozzles, ultrasonic transducers and/or insoluble nozzles and that the claims require insertion elements fitted into recesses of the carrier elements. See the sworn statement of numbered paragraph 8 of the Rule 132 Declaration provided herewith, with respect to this feature, as well as to the fact that Henington et al has no disclosure that its treatment device fits into any recess of its carrier

REMARKS

With the present amendment, as is supported with the Declaration under Rule 132 of the expert Mr. Uwe Hauf (provided herewith), all of the claims of this application have now been amended to focus on the mounting of the treatment devices in accordance with this invention. While previously, the claims covered the mounting of either the treatment devices or conveying members, they now focus on the mounting of the treatment devices. Some of the claims additionally add that the treatment devices could be with or without at least one conveying member, and they all specifically require that the treatment device comprises an insertion element fitted into recesses (21) of carrier elements (4, 5).

The basic reference that is applied, namely that of Henington et al, does have treatment devices 16, but Henington et al absolutely fails to teach the features that are required by the claims of the instant application as they are now amended, in that:

- (a) the treatment devices of Henington et al have no insertion elements to carry or secure them; additionally
- (b) Henington et al has no disclosure whatever as to how its treatment devices are mounted in its apparatus; and
- (c) Henington et al has no disclosure whatever that any treatment device 16 fits into any recess in any carrier elements of Henington et al, or even that they are carried by carrier elements of Henington et al.

While Henington et al does disclose its treatment devices 16, it has no disclosure whatever, that they are mounted in any manner like its conveyor elements, or even that they are carried by any carrier elements, in any respect.

In this regard, the Examiner is specifically referred to numbered paragraph 7 of the Rule 132 Declaration provided herewith.

Additionally, all of the claims of the present application require, that the module system that includes treatment devices be flow nozzles, jet nozzles, fan nozzles, ultrasonic transducers and/or insoluble nozzles and that the claims require insertion elements fitted into recesses of the carrier elements. See the sworn statement of numbered paragraph 8 of the Rule 132 Declaration provided herewith, with respect to this feature, as well as to the fact that Henington et al has no disclosure that its treatment device fits into any recess of its carrier

elements or even that its treatment devices 16 are in any respect carried by insertion elements.

The Examiner is also referred to numbered paragraph 9 of the Rule 132 Declaration, that establishes that the elements 20A, 20B and 22 (Fig. 1, 5A, 5B, 5C) of Henington et al are not treatment devices. See also numbered paragraph 10 of the Rule 132 Declaration in that regard.

In numbered paragraph 11 of the Rule 132 Declaration, the non-obvious advantage of the present invention is discussed in detail by the expert Uwe Hauf, in terms of the ability of rapidly and efficiently retrofitting treatment units to permit ready utilization of different treatment devices without requiring major expense and without requiring that the carrier elements need to be replaced each time a change has to be performed in a treatment unit, all of which results in shorter delivery time and higher flexibility with changes in applications of or for the treatment units. All of this is addressed in numbered paragraph 11, as presenting a treatment unit which produces a new and unexpected result. See also numbered paragraph 12 of the Rule 132 Declaration provided herewith, in this regard.

In numbered paragraph 13 of the Rule 132 Declaration, the expert Uwe Hauf addresses why a person skilled in the art would not have contemplated having treatment devices carried or secured by insertion elements. While insertion elements can be used for carrying transport elements or conveying members like roller or axles so that with axles that rotate in their bearings can readily have the bearings replaced because they wear out after some time, so that by using insertion elements as bearings instead of mounting the conveyor members directly into carrier elements, it is only necessary to replace the insertion elements instead of replacing the complete carrier elements, so that is a benefit when the system is mounting conveyor members. But that paragraph also addresses that such a benefit would not be achieved if treatment devices were carried or secured by insertion elements, because the treatment devices do not cause the wear and tear on bearings, because they do not rotate. Accordingly, there would be no motivation for one skilled in this art to carry or secure treatment devices by insertion elements as required by the claims of the instant application.

Additionally, there are secondary indicia of patentability in the form of commercial success, and positive acceptance by others in the field, in accordance with the tests of *Graham v. John Deere Co.* 383 U.S. 1, 36 (1966). The *Graham v. John Deere Co.* case was also referenced in *KSR International v. Teleflex Inc.* 550 U.S. 398 (2007).

Numbered paragraph 16 of the Rule 132 Declaration herewith, together with Exhibit B

thereto indicates the high increase in turnover, from a level of 200% at the time of introduction of this invention into UNIPLATE treatment units in early 2004, up to 2008, at an increase of 540% relative to 2001, notwithstanding no price reduction. As the Declaration indicates, this was a strong indication of the relation between the successful sales of the treatment units and the incorporation of the new invention, with the nexus between the features of the invention as discussed in paragraphs 7 and 8 of the Declaration, and the substantial commercial success. See also paragraph 17 of the Declaration in this regard.

Furthermore, numbered paragraph 15 of this invention addresses the positive feedback of customers due to the short idle times and higher throughput in treating materials via these treatment units, relative to what is achieved with conventional units like that of the Henington et al apparatus.

These secondary considerations under *Graham v. Deere Co.* fully support the unobviousness of the invention set forth herein.

Thus, the Examiner is directed to the fact that the claims of this application are now all limited to a module system with treatment devices (with or without at least one conveying member) but wherein the treatment devices comprise an insertion element fitted into a recess 21 of the carrier elements 4-5, which is an inventive feature that differs substantially from Henington et al. Henington et al's treatment device 16 has no insertion elements that carry or secure them. Henington et al's disclosure contains no disclosure of how its treatment devices are mounted in the apparatus. Furthermore, Henington's disclosure contains no disclosure that any treatment device 16 thereof fits into a recess in the carrier elements of Henington et al. In short summary, Henington et al has no insertion elements for Henington's treatment device.

The Examiner's comments of numbered paragraphs 3 and 4 of the Official Action of January 21, 2010 are noted. Those comments are principally directed to how the Examiner would modify the conveyors of Henington et al.

However, with respect to the claims that are now presented, they are not predicated on the conveyors of this invention; rather, the claims that are now presented are directed to the treatment devices and how they are mounted, and are explicit to features that are nowhere disclosed or suggested anywhere in Henington et al.

It is noted that in paragraph 4, the Examiner references claim 5 as being unpatentable over Henington et al in view of Pender. But Pender does nothing to satisfy the deficiencies of

Henington et al mentioned above. Pender has no disclosure as to how its treatment devices 31 are mounted, and no disclosure that they are mounted in any respect by carrier elements. Furthermore, Pender does not contain any disclosure of mounting its treatment devices 31 in insertion elements, or in recesses of the carrier elements. Thus, Pender adds nothing to its combination with Henington et al that addresses the deficiencies of Henington et al as are discussed very substantially above.

In numbered paragraph 5 of the Official Action of January 21, 2010, the Examiner addresses the combination of Henington et al in view of Haas et al '932 relative to claims 11-19. But Haas et al is addressed to the gear drives at the end of a conveyor mechanism, and has nothing whatever to do with any disclosure of mounting treatment devices in insertion elements, or in recesses of carrier elements. Thus, Haas et al contains no disclosure whatever addressing the deficiencies of Henington et al.

For all of the above reasons, it is submitted that the claims of this application, as amended herein, are unobvious over the art, principally for failure of the art to address features that are absolutely required by all of the claims of this application, and additionally, because of the secondary considerations of patentability, in the form commercial success and acceptance by the industry, as are addressed in the Declaration under Rule 132 provided herewith.

Entry of the amendment and Declaration into the application, and allowance of all of the claims are respectfully solicited.